clature, and we might as well go back to the very beginning of plant names if we want to be absolutely just and "render unto Cæsar the things that are Cæsar's." On this point no less an authority than Bentham declared that "the specific adjective of itself is not the name of a plant," and that "for a species the combination of the substantive and adjective is absolutely necessary." It follows from this that a plant is not correctly named, until it receives its proper generic and specific name in combination.

But perhaps the strongest objection to the insistence on the use of the specific name under any and all circumstances is the absurdity to which it leads in the use of homonyms. In a reply which I wrote to Mr. Stearns' paper on Nomenclature in the Bulletin of the Torrey Botanical Club, but which was withheld from publication, I pointed out that the legitimate outcome from the proposed reform, if carried out, must lead to the adoption of what DeCandolle, Bentham, Dr. Hooker, Dr. Gray and such eminent botanists had always regarded as too absurd for consideration, as it was not thought probable that any botanist would adopt anything of the kind. Yet it has come about exactly as I said and we are treated to such absurd combinations as Phegopteris Phegopteris, Scolopendrium Scolopendrium, and such startling propositions as Polypodium polypodioides—a Polypodium that looks like a polypodium! What a wonderful revelation of scientific knowledge and information that is, to be sure, and how helpful it must be to the average collector in the field!

I have elsewhere stated my willingness to sacrifice my own personal views and accept without reservation any code approved by representative botanists of all countries in an international congress. National pride, the heritage from generations of American born ancestors, would naturally incline me to prefer methods originating in American atmosphere, but science is cosmopolitan and knows no boundaries. She seeks only for the truth, and the best, come from where it may and therefore it has seemed to me that the so-called Vienna rules proposed by the German botanists at Berlin offer a much better basis for permanent agreement than our own and l would be glad to see them, or similar ones prevail.—GEORGE

E. DAVENPORT.

Some remarks on nomenclature.

I cannot see how the nomenclature question can otherwise be settled than by a Paris congress in the year 1900 with four

or five years international preparation for the reformed Paris Codex.

But the Société botanique de France needs to be encouraged by foreign botanists to arrange for such a congress, inasmuch as the nomenclature questions are the least treated by French botanists, and the Paris Codex of 1867 was more the work of foreigners.

It seems also that the French Botanical Society lacks the funds to prepare properly for such a congress; in your country more is spent for science by private people than in any other land, so it is to be hoped that somebody will offer money promptly for that purpose, helping thereby to establish an in-

ternational nomenclature of plants.

I did not mix after 1893 in the United States botanists quarrels over nomenclature, considering them as home quarrels. But I may say that wrong enough has been done on both sides, and I proved only in 1894 that the two specific North American rules, accepted so promptly in Madison before the beginning of the congress there, were very bad. See my Nomenclaturstudien in Bull. Herb. Boissier. The BOTAN-ICAL GAZETTE, although most conciliatory and impartial, did not print my figures, which convinced the European botanists about the harmfulness-if retroactive-of the two American rules, so I hope you will do it still. I. "Priority in place at all events" from Linné's Species Plantarum 1753 causes the changing of at least twenty generic names and 4,600 specific names. 2. The rule: "Once a synonym always a synonym" is very bad if retroactive. I gave in my Nomenclaturstudien a list, made in a short time, of 200 generic names of personal derivation, which would thereby be changed with about 1,737 specific names. Surely for the whole system 300-400 more generic names would lose their usual names. For the future that rule is excellent; that is to say not for the "future difficult to define" but for each future case. If any one finds a name whose renewal is necessitated by priority, he shall not renew it, if a former homonym exists since the international beginning of our nomenclature. That is very easy to manage.

It is quite untrue as stated in another United States paper, that the so-called Vienna rules of 1894 were accepted in Vienna by the German and Austrian botanists. On the contrary they were rejected and left to a future congress, for

which congress at Berlin, although proposed for 1895, nothing has been done or prepared, so far as I know, although! worked in the Berlin botanic museum till last October.—OTTO KUNTZE, San Remo, Italy.

Dates and references, and priority in nomenclature.

It does not seem too much to expect from those who would purify botanical nomenclature, that they should be themselves pure. But those who have had to do with comparing references with the originals, will be surprised at the enormous number of inaccuracies that pass current. A new reference book is required as badly as a purified nomenclature. In the preparation of the chapters to go with the plates in my "Flowers and Ferns of the United States," and its continuation, "Meehans' Monthly," I have tried to verify original references, and can say of my own personal knowledge that references to dates and authors are in a most deplorable condition.

I am just now at work on the two species of Chimaphila, C. umbellata and C. maculata. My good friend Conway MacMillan contends in the "Metaspermæ of the Minnesota Valley" that we must drop Chimaphila of Pursh (1814), and adopt Pseva of Rafinesque," Jour. Phys. 79: 261. 1809. turn to "Index Kewensis," and find it is "Jour. Phys. Sc." thus indicating that it may be an English title, but there is no such work. I try again and examine the work usually referred to as "Jour. Phys.," Desvaux "Journal de physique, and examine page 261, volume 79, but there is not a word about Rafinesque or botany. Looking again at "Index Kewensis," I suspect an error in adding "Science" to the title, and note that they give 1819 for the date, instead of 1809. Examining "Journal de Physique" for that year, I find a paper by Rafinesque entitled "Remarks critiques et synonymiques sur les ouvrages de MM. Pursh, Nutt.,"—and a host of others -"sur les plantes des Etats-Unis." These authors are handled without gloves, and one can hardly wonder at the coolness shown to him by his co-laborers. "Ipomopsis Mx. and Ipomeria Nuttall, are absurd." "Ammyrsine Pursh is an abominable name." Mahonia should be changed "as dedicated to a gardener who does not merit the honor." "Lyonia should be changed as it is too near Allionia." "Epifagus Nuttall, is an absurd name." The whole paper is simply? critique, with no pretension of describing anything. But